

Notice of Allowability	Application No.	Applicant(s)	
	09/683,355	HARDING, KEVIN GEORGE	
	Examiner	Art Unit	
	Sath V. Perungavoor	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/07/2005.
2. ☒ The allowed claim(s) is/are 1 and 3-10 (Renumbered 1-9).
3. ☒ The drawings filed on 18 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|--|---|

DETAILED ACTION

EXAMINER'S AMENDMENT

[1] An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Jean Testa (Reg. No. 39,396) on April 25, 2005.

The application has been amended as follows:

Applicant Submitted Claim

Claim 1 line 4-5 recites, "establishing, using said known speckle contrast and known measurement system accuracy limitations, a maximum observable speckle size;"

Examiner's Amendment

Examiner amends claim 1 to recite, "establishing, using said known speckle contrast and known **non-contact non-moving gauge** measurement system accuracy limitations, a maximum observable speckle size;"

Applicant Submitted Claim

Claim 5 line 10 recites, "altering said detector lens by adjusting said lens f-number to said determined value".

Art Unit: 2625

Examiner's Amendment

Examiner amends claim 5 to recite, "altering said ~~detector~~ lens by adjusting said lens f-number to said determined value".

Applicant Submitted Claim

Claim 8 line 3-4 recites, "measuring a range of light scatter angles in said observed laser light scatter from the surface finish of the object;"

Examiner's Amendment

Examiner amends claim 8 to recite, "measuring a range of light scatter angles in said observed laser light scatter distribution from the surface finish of the object;"

Applicant Submitted Claim

Claim 9 line 9-10 recites, "altering said detector lens by reducing a lens f-number to a minimum value having a resolution corresponding to said identified minimum resolving power".

Examiner's Amendment

Examiner amends claim 9 to recite, "altering said ~~detector~~ lens by reducing a lens f-number to a minimum value having a resolution corresponding to said identified minimum resolving power".

REASONS FOR ALLOWANCE

[2] The following is an examiner's statement of reasons for allowance: The instant invention is a method for three-dimensional sensor laser noise reduction.

Regarding Claims 1, 5 and 9: Applicant uniquely claimed a distinct feature in the instant invention, which are not found in the prior art, either singularly or in combination. The feature being, **"the size of the laser speckle noise observed by said detector in said image is determined by a convolution of the inverse Fourier transform of said laser light scatter distribution, and an impulse response of said detector lens"**. This feature is not found or suggested in the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

[3] Claims 1 and 3-10 are allowed.

Art Unit: 2625

Contact Information

[4] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh Mehta whose telephone number is (571) 272-7453, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sath V. Perungavoor
Art Unit 2625
April 26, 2005

MEHRDAD DASTOURI
PRIMARY EXAMINER

